

REMARKS

This amendment is submitted in response to the Office Action of July 8, 1999, wherein the Examiner has rejected claims 1-21 under 35 U.S.C. § 102(b) as being allegedly anticipated by U.S. Patent No. 5,557,077 to Berg. In addition, the Examiner has rejected claims 1-21 under 35 U.S.C. § 103(a) as being allegedly unpatentable over either U.S. Patent No. 5,044,463 to Carr or U.S. Patent No. 4,253,452 to Powers et al. or U.S. Patent No. 4,936,411 to Leonard.

Turning first to the Examiner's rejection of claims 1-21 under 35 U.S.C. § 102(b). The Examiner contends that the Berg reference discloses each and every element of the claims. Berg teaches using a metal powder (flake), dispersing it in a plastic material, and then using this material to form both a cord and an earplug. Since, the earplug and cord are made with a metal flake, a method is provided to make a metal detectable product. The metal powder is admixed with the plastic material and thus is dispersed entirely throughout the plastic material which is used to form both the earplug and the cord. As amended, claim 1 recites an earplug having a foam body free of detectable material and a detectable insert encapsulated within the foam body. Applicant respectfully submits that a rejection of amended claim 1 under 35 U.S.C. § 102(b) is improper because Applicant teaches that the foam body is free from detectable material. Conversely, Berg teaches that the foam body includes dispersed throughout metal powder (flakes) which comprises a detectable material. Thus, because the element of having a foam body which is free of detectable material is not taught by Berg, the rejection of claim 1 under 35 U.S.C. § 102(b) must be withdrawn.

Claims 2-6 variably depend on what should now be an allowable independent claim 1 and therefore the rejection of these claims under 35 U.S.C. § 102(b) should be withdrawn and the claims should now be allowable.

Claim 7 has been amended by Applicant to disclose a method of manufacturing an earplug. The rejection of claim 7 under 35 U.S.C. § 102(b) is improper because first, as amended, the claim recites that the foam body is free of detectable material. For the reasons stated hereinbefore with reference to claim 1, Berg fails to teach this element. Second, claim 7 recites that a channel is formed and the detectable insert is placed therein and the foam body encapsulates the insert. The method of manufacturing an earplug according to Berg is entirely different in that metal powder is admixed with the plastic material and then the plastic material is used to form the earplug and cord. There is no mention of forming a channel or inserting the insert within the channel so that the foam body encapsulates the insert. In fact, Berg teaches away from forming a channel because the metal powder is dispersed throughout the foam body and forming a channel for placement of an insert serves no purpose. Accordingly, Applicant respectfully contends that the rejection of claim 7, as amended, under 35 U.S.C. § 102(b) is improper.

Claims 8-15 variably depend on what should now be an allowable independent claim 7 and therefore the rejection of these claims under 35 U.S.C. § 102(b) should be withdrawn and the claims should now be allowable.

Claim 16 is directed to a method of manufacturing an earplug comprising projecting a detectable insert into the foam body at a predetermined trajectory and speed and allowing the foam body to encapsulate the insert. Berg teaches none of these features in that Berg discloses

admixing metal powder with plastic material to disperse the metal powder throughout the plastic material prior to forming the foam body and cord made thereof. In no way, does Berg teach projecting an insert into a foam body. This serves no purpose whatsoever because the detectable material is already admixed with the plastic material. In view of the clear distinction between the two methods of manufacture, Applicant respectfully requests that claim 16 be allowed.

Claims 17-21 variably depend on what should be an allowable independent claim 16 and therefore the rejection of these claims under 35 U.S.C. § 102(b) should be withdrawn and the claims should now be allowable.

The Examiner has further rejected claims 1-21 under 35 U.S.C. § 103(a) as being allegedly unpatentable over either Carr or Powers in view of Leonard. Carr teaches molding a plug with a hole formed therein. The hole is formed to assist in the demolding process and to create a comfort cavity. Carr mentions no other benefits to providing the hole in the foam body. Leonard teaches taking a metal ball, inserting it into a channel formed in the stem of the earplug, and then placing a cord into the channel to secure the metal ball therein. In order to make a product per Leonard, a plug must be provided having a stem 14 with a channel 20 formed therein. Leonard does not teach or suggest placing the metal ball 18 into the earplug portion 12 itself and no mention is made of encapsulating the metal body with the foam body. But rather in Leonard, the cord acts to cap the channel and prevent the metal ball from dislodging therefrom. Powers teaches a method of cording a plug. The disclosed method teaches making a hole in the plug, removing the punch that makes the hole, and then placing a cord into the hole.

Applicant respectfully submits that the rejection of claim 1 on these grounds is improper. Amended claim 1 teaches a foam body free of detectable material and a detectable insert

encapsulated within the foam body. None of the references teach or suggest encapsulating a detectable insert within the foam body. Leonard does not locate the metal ball in the foam body and furthermore, the cord acts to cap the metal ball within the channel. Thus, Applicant contends that Leonard does not teach encapsulating the metal ball within a foam body. The other references, Powers and Carr, are entirely silent of the topic of detectable inserts and in no way teach placement of detectable inserts. Applicant thus respectfully requests reconsideration and allowance of claim 1, as amended.

Claims 2-6 should now be allowable as variably depending from what should now be an allowable independent claim 1, as amended.

Claim 7 teaches a method of manufacturing an earplug comprising forming a channel in the foam body and placing a detectable insert in the channel, and allowing the foam body to encapsulate the detectable insert. For reasons stated previously with reference to claim 1, the references fail to teach or suggest Applicant claimed method. More specifically, Applicant's teaching of forming a channel, disposing the insert therein, and allowing the foam to encapsulate the insert is not taught or suggested by these references. The channel formed in the stem of Leonard does not permit the metal ball to be encapsulated within the foam body but rather is a more rigid channel that requires the use of the cord to cap the channel and prevent the metal ball from falling thereout. The other two references are silent of the use of detectable inserts in channels, wherein the insert is then encapsulated within the foam body. For at least these reasons, claim 7 should be allowed. Reconsideration and allowance are respectfully requested.

Claims 8-15 should now be allowable as variably depending from what should now be an allowable independent claim 7.

Claim 16 teaches a method of manufacturing an earplug wherein the detectable insert is projected into the foam body and the foam body is allowed to encapsulate the insert. All three references are silent of projecting a detectable insert into a foam body and then allowing the foam body to encapsulate the detectable insert. Projecting the metal ball of Leonard would serve no purpose because the metal ball is carefully placed in the rigid channel and then capped by the cord. The projecting of the metal ball is not necessary because the foam body of Leonard does not encapsulate the metal ball. As previously mentioned, neither Carr nor Powers teach using detectable inserts and furthermore do not teach or suggest the projection of a body into a foam body to cause encapsulation of the insert. For at least these reasons, Applicant request that claim 16 be passed to issue.

Claims 18-21 should be allowable as variably depending on what should be allowable independent claim 17.

Applicant has added claims 22-23 and request issuance thereof.

Accordingly, as the references cited in the Office Action do not render obvious that which the Applicant deems to be the invention, it is respectfully requested that claims 1-23 be passed to issue. The remaining references, although not cited as prior art, were found to be even less relevant and therefore no further discussion is required.

It is believed that the foregoing remarks fully comply with the Office Action.

Applicant request that the amount of \$36.00 for the addition of two claims be charged to Deposit Account No. 06-1130 maintained by Applicant's Attorneys.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130 maintained by Applicant's Attorneys.

Respectfully submitted,

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